

What is Vancomycin Resistant *Staphylococcus aureus* (VRSA)?

Staphylococcus aureus is a bacterium commonly carried on the skin and within the nose of people. The bacteria can sometimes cause infections such as boils or pneumonia. Over time, the wide-spread use of antibiotics has led some *S. aureus* to become more resistant to these medicines. While most *S. aureus* are still susceptible to the antibiotic vancomycin, some (called "Vancomycin Resistant *Staphylococcus aureus*," or VRSA) have developed resistance.

Who gets VRSA?

VRSA is extremely rare - only a few cases have been documented in the US. Individuals who would get VRSA would likely have:

- Underlying health conditions (e.g., diabetes, kidney disease)
- Previous infections with methicillin-resistant *Staphylococcus aureus* (MRSA) - Catheters (e.g., intravenous [IV] lines)
- Exposure to vancomycin and other antibiotics

Can VRSA be spread from person-to-person?

S. aureus spread occurs by close physical contact with infected persons or materials that may carry the organism (e.g., bandages).

What are the symptoms of VRSA?

Most people carrying *S. aureus* do not have any symptoms, therefore carriers of VRSA are unlikely to have additional symptoms. Infections caused by VRSA would be similar to regular *S. aureus* infections. However, they would not respond as expected to vancomycin therapy. Confirming an infection is caused by VRSA requires laboratory testing of the organism.

How soon after exposure do symptoms appear?

Variable - exposure does not necessarily lead to transmission, and carriage does not necessarily lead to infection.

Does past infection with VRSA make a person immune?

No - infections with VRSA can recur.

What is the treatment for VRSA?

To date, all VRSA isolates have been susceptible to several Food and Drug Administration (FDA) approved drugs. Therefore, it is possible to treat VRSA infections.

Recommendations for the treatment of carriage of VRSA do not exist. However, attempts at eradicating the carriage of

S. aureus should involve physicians, an infection control team, occupational health services and the local/state health departments.

What can be done to prevent the spread of VRSA?

Use of appropriate infection control practices (e.g., wearing gloves before and after contact with body fluids; appropriate handwashing or use of an alcohol-based hand sanitizer) by healthcare personnel would reduce the spread of VRSA. If you visit a person in the hospital who is infected with VRSA, follow the hospital's recommended precautions.

Outside of the healthcare setting, people having physical contact with a VRSA carrier should:

- Keep their hands clean by washing thoroughly with soap and water
- Avoid contact with other people's wounds or material contaminated from wounds

Is there a vaccine against VRSA?

There is no vaccine that can prevent VRSA colonization or infection.

